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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,253	05/02/2001	Neil C. Singer	0162095-0030	5037

24280 7590 10/03/2008
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EXAMINER	
PHAM, THIERRY L	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
10/03/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@choate.com

Office Action Summary	Application No.	Applicant(s)	
	09/847,253	SINGER ET AL.	
	Examiner	Art Unit	
	THIERRY L. PHAM	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14 and 17-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14 and 17-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

- This action is responsive to the following communication: RCE filed on 9/8/2008.
- Claims 1-14, 17-21 are currently pending, wherein claim 21 is newly added; claims 15-16 have been canceled.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/8/2008 has been entered.

Claim Objections

Claim 1 is objected to because of the following informalities: Claim1, line 4, please delete a duplicate entry of "computer peripheral". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9, 12-14, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Singer et al (WO 9945535).

Regarding claim 1, Singer discloses a system (system 1, fig. 1) comprising:

- a computer (PC 2, fig. 1);

- a means (keyboard 7, fig. 1) for selecting a mode of operation (modes of operation for controlling disk drive controls, figs. 4-7) of a computer-peripheral (disk drive 10, fig. 1, 10A-10B); and
- a computer peripheral (disk drive 10, fig. 1) comprising:

at least one element (actuator 74, fig. 10A-10B) supported for motion;

an electromechanical mechanism (electromechanical mechanism, page 15, lines 15-18) for moving the movable element (head 76, fig. 10A-10B, page 16, lines 8-23) along a desired trajectory (desired trajectory, fig. 4, page 31, lines 20-25); and

circuitry (controller/processor 73, fig. 10A-10B, page 16, lines 7-24) providing a shaped input (shaped input via using Input Shaping, page 17, lines 1-28, fig. 3) to the electromechanical mechanism to move the movable element along the desired trajectory,

wherein the desired trajectory is determined using Input Shaping (Input Shaping, page 14, lines 25-27)

Regarding claim 2, Singer further discloses the system of claim 1 in which the desired trajectory results in maximum speed (quick or maximum speed, page 15, lines 22-23, fig. 4).

Regarding claim 3, Singer further discloses the system of claim 1 wherein the desired trajectory results in quite operation (quite, fig. 4).

Regarding claim 4, Singer further discloses the system of claim 1 wherein the desired trajectory results in vibration-reduced operation (noise level or vibration-reduced, fig. 5, page 17, lines 3-4).

Regarding claim 5, Singer further discloses the system of claim 1 wherein the desired trajectory reduced unwanted frequencies (unwanted frequencies, page 11, lines12-24).

Regarding claim 6, Singer further discloses the system of claim 1 further including a sensor (sensor 75, fig. 10B) responsive to the dynamic response of the peripheral.

Regarding claim 7, Singer further discloses the system of claim 6 wherein the sensor is an accelerometer (page 72, lines 22-23).

Regarding claim 9, Singer further discloses the system of claim 6 wherein an output from the sensor is used by the circuitry to provide the shaped input (page 11, lines 13-22 and page 14, lines 22-30).

Regarding claim 12, Singer further discloses the system of claim 1 wherein the means for selecting comprises a user interface (figs. 4-6).

Regarding claim 13, Singer further discloses the system of claim 1 wherein the trajectory is quick, quite, or in between (fig. 4).

Regarding claim 14, Singer further discloses the system of claim 1 wherein the trajectory suppresses unwanted frequencies (unwanted frequencies, page 11, lines12-24).

Regarding claim 21, Singer further discloses the system of claim 1 further including a user control for tuning the computer peripheral to its environment (e.g. temperature, resistance, and etc., page 67, lines 3-16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 10-11, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singer as described in claim 1 above, and further in view of McConnell et al (US 6011373).

Regarding claim 8, Singer teaches a method for suppressing noise and/or vibration within a computer peripheral device using sensor 75, but does not teach and/or suggest wherein a sensor is a microphone.

McConnell, in the same field of endeavor for vibration suppression of a computer peripheral device, teaches a well-known example of a microphone for measuring sound/noise of the computer peripheral device (a sensor device for measuring sound/noise of the printer device, col. 22, lines 35-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify vibration suppression system/method of Singer to include microphone sensor or sound sensor as taught by McConnell because of a following reason: (●) accurate sound/or noise level can be measured via using microphone sensor or sound sensor so that a better output response can be generated to accurately reduce/suppress vibration/noise within the computer peripheral.

Therefore, it would have been obvious to combine Singer with McConnell to obtain the invention as specified in claim 8.

Regarding claims 10-11, 17-18, McConnell further discloses the peripheral of claim 1 wherein the peripheral is a printer/scanner (inkjet printer, col. 22, lines 35-37, multifunctional printer including scanner (i.e. copy machine) is widely available and known in the art, and also notes printer is just an example of an physical output system as discussed by McConnell, other physical output system also applied).

Regarding claim 19, McConnell further discloses the peripheral of claim 17 wherein the moveable element is a print head (ink cartridge, col. 22, lines 35-42).

Regarding claim 20, McConnell further discloses the peripheral of claim 17 wherein the moveable element is a paper feeding mechanism (obviously, all printers include a paper mechanism).

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THIERRY L. PHAM whose telephone number is (571)272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571)272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thierry L Pham/
Art Unit 2625

/Dov Popovici/

Primary Examiner, Art Unit 2625